



AGRICULTURAL LAND CLASSIFICATION
PROPOSED CARAVAN PARK
WAXHOLME ROAD, WITHERNSEA
HUMBERSIDE

MARCH 1996

ADAS
Leeds Statutory Group

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SUMMARY

A detailed Agricultural Land Classification (ALC) survey of 17.4 ha of land at Withernsea ("Proposed Caravan Park, Waxholme Road, Withernsea") was carried out in March 1996. At the time of survey all of the site was in agricultural use and 8.8 ha of this falls in Subgrade 3a. The soils are generally imperfectly drained, with medium-textured topsoils and upper subsoils overlying gleyed and slowly permeable heavy clay loam or clay at between 40 cm and 50 cm depth. Soil wetness limits this land to Subgrade 3a.

The remainder of the site (8.6 ha) falls in Subgrade 3b. Soils in this area are poorly drained, with medium-textured topsoils overlying gleyed and slowly permeable clayey subsoils at around 30 cm depth. A more severe soil wetness limitation further restricts the ALC grade of this land to Subgrade 3b.

Average coastal erosion rates in this area are estimated to be less than one metre per year, and therefore do not provide any additional limitation to ALC grade.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT WAXHOLME ROAD,
WITHERNSEA - PROPOSED CARAVAN PARK

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This site lies on the north-western edge of Withernsea between the B1242 road and the coast. Detailed survey work was carried out in March 1996, when the soils were examined by hand auger borings at 100 m intervals pre-determined by the OS National Grid and two profile pits were dug to allow the soils to be examined in greater detail. The land quality was assessed using the methods described in "Agricultural Land Classification of England and Wales. Revised guidelines and criteria for grading the quality of agricultural land" (MAFF, 1988).

1.2 Land Use and Relief

At the time of survey all of the land was sown to winter cereals although the crop in the north of the site was very sparse.

Site altitude varies from 15 m AOD in the east to approximately 13 m AOD in the west and the land is level to gently sloping (0-3°), generally with a southerly or south-westerly aspect.

1.3 Climate

Grid Reference	: TA 332 291
Altitude (m)	: 13
Accumulated Temperature above 0°C (January - June)	: 1382 day °C
Average Annual Rainfall (mm)	: 614
Climatic Grade	: 1
Field Capacity Days	: 134
Moisture Deficit (mm) Wheat	: 112
Moisture Deficit (mm) Potatoes	: 104

The site is located immediately above the sea cliffs. Consequently crops will experience some problems such as salt burn and wind exposure will be greater compared with areas further inland. Cool east winds will also delay crops establishment in the spring. An overall climate limitation of Grade 2 is therefore appropriate to the site. This is lower than the Grade 1 climatic grade suggested by the interpolated climate data.

1.4 Geology, Soils and Drainage

The Withernsea area is underlain by Cretaceous Chalk over which lie deep deposits of reddish till.

The soils on this particular site are generally imperfectly or poorly drained, falling in Wetness Classes III or IV, with medium clay loam topsoils and, in the west, upper subsoils, overlying gleyed and slowly permeable heavy clay loam or clay.

The soils belong to the Flint association as mapped by the Soil Survey and Land Research Centre.

Coastal erosion rates of the Boulder Clay cliffs along the Holderness coast are published in the draft Shoreline Management Plan. At the proposed caravan site erosion rates are considered to be relatively low at about or less than 1 metre a year. Consequently were those rates to continue in the future little land on the site will be lost to the sea each year. Most of the proposed site can therefore be considered to have a potential to remain in agricultural use for several decades to come.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>% of Total Area</u>
1		
2		
3a	8.8	50.6
3b	8.6	49.4
4		
5		
(Sub total)	(17.4)	(100.0)
Other Land		
TOTAL	17.4	100

2.1 Subgrade 3a

The west of the site falls in Subgrade 3a. The soils are generally imperfectly drained (Wetness Class III), with medium clay loam or sandy clay loam topsoils and upper subsoils overlying gleyed and slowly permeable heavy clay loam or clay at between 40 cm and 50 cm depth. Soil wetness is therefore the factor which limits the ALC grade of this land. Average coastal erosion rates in this area are less than one metre a year and if these rates continue the Subgrade 3a land will not be significantly affected for several decades.

2.2 Subgrade 3b

The east of the site falls in Subgrade 3b. The soils are poorly drained (Wetness Class IV), with medium clay loam topsoils overlying gleyed and slowly permeable clay subsoils at between 30 cm and 35 cm depth. A more severe soil wetness limitation than on the adjoining Subgrade 3a land restricts this land to Subgrade 3b. The average coastal erosion rates, at less than one metre per year, are not sufficient to merit downgrading below Subgrade 3b.

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MAP